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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,075	01/08/2004	Holger Hoppe	543822003100	5426
25227 7590 04/11/2007 MORRISON & FOERSTER LLP 1650 TYSONS BOULEVARD SUITE 400 MCLEAN, VA 22102			EXAMINER ABRAMS, NEIL	
			ART UNIT 2839	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/11/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/753,075	HOPPE, HOLGER	
	Examiner	Art Unit	
	Neil Abrams	2839	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim 5, "metal alloys" seems incorrect , should it be changed to - - material - - .

1. Claims 1-5, 7-10, 14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Harper.

2. Harper includes adapter (figures 1, 3) with connection pins 13 that extend downward from bottom of housing 11 and at 17 are bend back towards the housing, are "outside the housing", and that are angled between 30 and 60 degrees. The figures 6, 8 embodiments are similarly applied. Functional languages of claim 1, lines 10-12, "so as to avoid... is mounted to the contact device" are readable on Harper to same extent that they are readable on applicants device. Note that all claims are to device "before" mounting to the contact device or pcb . For claim 1 and also for claims 2, 3, 7, 8, etc. references to "testing" define no structure over Harper, which is capable of such use. Claim 5, see column 2, line 46. All other claims covered by above discussion. Harper alone is adequate under 35 USC 102 ,however, as alternative , should aspects of Harper disclosure , such as use as a testing device, be at issue, it is submitted that these would be obvious variations of his teachings.

3. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harper in view of Bargain and Martin.

4. Harper does not show pressing means (screw or clamps). Bargain at 64, 65 and Martin fig 6 at 78,74 use such means. Obvious to add such feature to Harper to enable a component L to be pressed tightly against the contacts.

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5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harper in view of Lopergolo.

6. Harper has no testing step. Lopergolo uses an adapter for testing. Obvious to use such step in Harper system as this would be a standard use of sockets.

7. Claims 1-5, 7-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harper in view of Martin and Lopergolo.

8. For claims 1-5, 7-15 should the "tips of end sections" be "outside the housing" terms be read to require the contact tips to so remain "after" mounting to the pcb, it is noted that Harper is not clear in this regard. In such a case note that Lopergolo, figure 1 at 24 and Martin, figure 10, show adapters used in such manner that lower contact ends remain "below" the plane of the housing lower surface after pcb mounting. It would have been obvious to form the Harper device so that even after pcb mounting, contact lower ends would remain "outside the housing". This change would cause a more uniform contact loading.

9. For claims 11-13, Harper lacks pressing means. Martin use such means (screw, clamps) in figure 6 at 78, 74. Obvious to apply same to Harper to hold adapter, pcb and LGA in place.

10. For claim 15, Harper, Lopergolo applied as above , para 5, but together with Martin. This Lopergolo test use suggestion also applied to Harper with respect to claims 1-5, 7-14 in the event , such aspect becomes at issue for those claims.

11. Claims 1-5, 7-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lopergolo in view of Rathburn, Hashiguchi 389, and Grabbe 826.

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12. Lopergolo, figure 5 discloses a test socket with housing 55 and contacts pins 51 (figure 4c) that extend below the housing and have bent lower portions at 43 and that are outside the housing.

13. The contact pins are not at an angle between 30, 60 degrees and do not appear to bent towards the housing bottom wall.

14. Grabbe discloses angled 30 degrees contact arrangement in figure 2A. Obvious to so arrange the Lopergolo, figure 5 contacts to enable greater spacing between contacts. As to the "bent back upward" terms these do not provide a specific result or significant difference over the Lopergolo contact ends at 54 and are considered an obvious variants in view of their clear structural equivalence. In addition, Hashiguchi contacts, figures 5, 6 at 24a, 24b and those of Rathburn, figure 22 at 431 are bent upwardly. Obvious to so form Lopergolo contact ends 54 to insure smooth wiping of contacts on pads of pcb 14.

15. Applicant's arguments filed with the amendment have been fully considered but they are not persuasive. References are now applied to show the "contact tips outside the housing" feature, which is the main issue in this case.

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to Neil Abrams at telephone number 571-272-2089


NEIL ABRAMS
PRIMARY EXAMINER